No. 87-94

AUG 13 1987
JOSEPH F. SPANIOL, JR.
CLERK

IN THE

Supreme Court of the United States

OCTOBER TERM, 1987

AMERICAN CYANAMID COMPANY,

Petitioner,

v.

THE DOW CHEMICAL COMPANY,

Respondent.

RESPONDENT'S BRIEF IN OPPOSITION TO THE PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

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PRESS OF BYRON S. ADAMS, WASHINGTON, D.C. (202) 347-8203

QUESTION PRESENTED

Petitioner's so-called "Question Presented" is fictitious. No such question arises on this record because the decision below was fully consistent with this Court's relevant decisions.

STATEMENT PURSUANT TO COURT RULE 28.1

Pursuant to Court Rule 28.1 Respondent, The Dow Chemical Company, states that it is a corporation of the State of Delaware. It has no parent company and no affiliates and its subsidiaries other than wholly owned subsidiaries are:

Alamo Land Company Inc.
Arabian Chemical Company (Saudi Arabia)
Compagnie des Services Dowell Schlumberger (France)
Chief Shipping Company (Liberia)
DCU/LB Trust
JV Chemicals (South Africa)
Cromarty Petroleum Company Limited (United Kingdom)
Scotdril Offshore Company (Scotland)
Chimtrade (Bulgaria)
Vorakim Kimya Sanayi Ve Ticaret A.S. (Turkey)
Transformadora de Etileno S.A. (Spain)
Dowell Schlumberger Canada Inc. (Canada)
Limited Partnership (Canada)
H-D Tech Inc. (Canada)
MT Partnership (Canada)
Wabiskaw Explorations Ltd. (Canada)
Haeger and Kaessner Limited (Japan)
Viopol S.A. (Greece)
Dow Corning Corporation
Dowell Schlumberger Corporation (Panama)
Dowell Schlumberger Incorporated
El Dorado Terminals Company (New Jersey)
Insul/Crete Company, Inc.
ISOPOR—Companhia Portuguesa de Isociantos Ltda. (Portugal)

Ivon Watkins-Dow Limited (New Zealand)
Joliet Marine Terminal Trust Estate
M. D. Kasei Limited (Japan)
Funai Pharmaceuticals Company Ltd. (Japan)
First Chemical Factoring S.p.A. (Italy)
Laboratories Industriales Farmaceuticos Ecuatorianos (Ecuador)
MDP (Holdings) Ltd. (United Kindgom)
Dow Chemical Service GmbH (West Germany)
Metal Mark, Inc.
Fort Saskatchwan Ethylene Storage Corp. (Canada)
Oronzio de Nora Impianti Elettrochimici S.A., Lugano (Switzerland)
P.T. Pacific Chemicals Indonesia (Indonesia)
Pacific Chemical Berhad (Malaysia)
Petroquimica-Dow S.A. (Chile)
The Cynara Company

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Allegretti & Banner, *Obviousness: A Trial Lawyer's Perspective*, 13 Intellectual Property Law Review 147, 169 (1981) 9

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Respondent, The Dow Chemical Company, respectfully requests that this Court deny the petition for writ of certiorari in this case. The decision to which the petition is directed is reported at 816 F2d 617 (Fed. Cir. 1987) (Appendix to Petition, i.e., App. pp. 1a–16a). It was an affirmance of the District Court decision reported at 615 F. Supp. 471 (E.D. La. 1985), (App. pp. 32a–62a).

WHY THE WRIT SHOULD NOT ISSUE

Foreword

The petition in this case is premised on the assumption that the judgment below is in conflict with

this Court's holding in *Graham v. John Deere Co.*, 383 US 1 (1966). But that assumption is unfounded. Petitioner's so-called "Question Presented" does not arise on the record in this case. Rather the question is nothing more than a poorly veiled attempt by Petitioner to have this Court review and reverse findings of fact—unfavorable to Petitioner—made by the District Court and affirmed by the Court of Appeals. Both courts applied accepted principles and rules of patent law to the compelling evidence of record.

The case alleged by Petitioner to be in "conflict" with the decision in this case, namely, *Standard Oil v. American Cyanamid*, ("Sohio"), 774 F2d 448 (Fed. Cir. 1985), was reviewed and correctly distinguished by the Court below on the ground that it involved a different invention, different patent claims and a different factual record. (App. p. 4a)[1]

The Question Presented for Review Does Not Arise

By its question, Petitioner asserts that the Federal Circuit, in deciding this case, did not apply the tests for determining patentability of inventions which were prescribed in *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). But a review of the majority opinion shows at once that Petitioner's contention is unsound. Guided by the *Graham* standards the Courts below reviewed the fact findings and the evidence underlying such as established by the District Court, found the claimed Dow inventions to be unobvious over the prior art, and only after such determination considered the great commercial success of the Dow inven-

[1] Both the *Sohio* opinion and the majority opinion below were written by Giles S. Rich a distinguished and well-known patent judge.

tions, and Cyanamid's copying of such as further support for the unobviousness of the inventions claimed in the Dow patents.

Petitioner now pretends that these secondary considerations, such as commercial success, constitute the sole difference between the decision of the Federal Circuit here and in the *Sohio* case. To formulate its question Petitioner equates the factual basis in both cases in total disregard to the findings of the District Court, Rule 52(a) of the Federal Rules of Civil procedure, requiring acceptance of findings of the District Court unless clearly erroneous, and the determination of the Federal Circuit that the *Dow* and *Sohio* cases involved different patents, different claims and a different factual record (App. p. 4a).

STATEMENT OF THE CASE

This case presents only the issues of a conventional patent infringement action with no unsettled questions of patent law involved. The Dow patents-in-suit[2] were held valid by the District Court and three of the patents were held to have been infringed. That judgment of infringement was not even appealed by Petitioner.

At the trial of the present case, the District Court heard days of testimony by fact and expert witnesses for both parties on the teachings of the references

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[2] The four Dow patents, U. S. Patent No. 3,631,104 and its Reissue No. 31,430, U. S. Patent No. 3,994,973, U. S. Patent No. 3,642,894 and U. S. Patent No. 3,758,578 and its Reissue No. 31, 356, claim the use of *reduced* copper oxide or copper salt catalysts in the hydration of *acrylonitrile* to acrylamide (38a-43a)

involved. Thus it had ample foundation on which to judge the level of skill in this art, evaluate the prior art, establish the differences of the claimed inventions over the prior art and to conclude that the claimed subject matter of Dow's claims was nonobvious.[3] Only *after* that factually based judgment of nonobviousness was made did the District Court and also the Court of Appeals weigh the effect of such considerations as commercial success, long-felt but unsolved need and copying, as *further support* for the holding of nonobviousness.

Petitioner not withstanding, the process claimed in the Dow patents is not "the same basic process" described in the prior art references. Only by substituting the factually incomplete characterization of the prior art in the *Sohio* record, for the far more extensive findings on the prior art in this record can Petitioner give that contention even superficial plausibility.

Thus, Petitioner relies on the Reppe patent as disclosing a prior art process of hydrating, i.e., converting by reaction with water a nitrile to its corresponding amide. But such reliance is unfounded as demonstrated by this finding of the *Dow* District Court :

> "Reppe does not teach the reaction of a nitrile with water over the copper catalysts, and does

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[3] It should be noted that the very same prior art that Petitioner urges to require a holding of unpatentability of the Dow patents, i.e., the Reppe and Watanabe references, was cited in a reexamination of Dow's patents in the United States Patent and Trademark Office which similarly held the subject matter claimed in the Dow patents to be inventive over such art (App. A pp. 41a–43a).

not disclose the hydration of acrylonitrile to acrylamide using a reduced copper compound as a catalyst" (App. p. 50a)

The Federal Circuit approved that factual analysis of the Reppe patent (App. p. 11a) and concluded that in Reppe "the copper catalyzed the saturation of the carbon-carbon bonds of the nitrile, *not its hydration to an amide*, the subject matter of the claims in suit" (App. p. 13a, emphasis added).

Petitioner pretends that the validity determinations in this case and *Sohio* were entirely based on the same prior art. But that is simply not true. The ruling of invalidity in the *Sohio* case was based solely on the Reppe and one or two Watanabe references, whereas in this case the District Court reviewed *four* Watanabe references and also considered the Greene et al patent, the subject of the *Sohio* case, as a prior art reference (App. pp. 48a–52a).[4]

Totally without record support is Petitioner's contention that the Dow patented process and that of Sohio are alike (Pet. p. 5). Both processes are directed to hydrating a nitrile to an amide but the starting materials and process steps employed are very different. Thus the Dow process converts an unsaturated nitrile, specifically acrylonitrile, to the corresponding

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[4] The additional Watanabe references which were not of record in the *Sohio* case were held by the District Court in this case to enhance the patentability of the Dow claims. That was also true of the Greene et al patent which explicitly taught that metallic copper alone was not an effective catalyst for converting acrylonitrile to acrylamide (App. pp. 51a, 52a). The Federal Circuit endorsed. (App. pp. 11a, 12a) Although there are additional prior art differences such are deemed to be of lesser significance.

amide, specifically acrylamide, using a heterogeneous (i.e., solid) catalyst which is obtained by reducing a copper oxide or copper salt (App. pp. 6a, 39a), whereas the process claimed in the Sohio patent includes the use of both saturated and unsaturated nitriles to form a wide range of products in addition to the corresponding amide with a homogeneous catalyst comprising as an essential element dissolved copperions. (App. p. 25a)

The District Court in this case recognized the fundamental difference between heterogeneous and homogeneous catalysis (App. p. 34a) and the proof of infringement in this case involved the strongly contested issue as to whether Cyanamid's catalysts involved a reduced copper oxide (App. pp. 43a, 44a and 57a to 61a) which was decided in Dow's favor and not appealed. The use of a copper catalyst obtained by reduction—a key element of the inventions claimed in the Dow patents[5]—is wholly absent from the process claimed in the Sohio patent.

The contrasting nature of the Sohio and Cyanamid catalysts played an important role in the *Sohio* case, keynoting as it did the ultimate judgment that because of the difference in the catalysts the Cyanamid process did not infringe (App. p. 25a). Thus in the *Sohio* case the District Court found that the Greene et al patent claims specifically excluded solid, heterogeneous catalysts and were limited to catalysts containing copper ions in solution. (App. p. 21a)

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[5] Because of its high selectivity in forming acrylamide, its high conversion rate and its long life, the use of reduced copper oxides was hailed as a breakthrough in technology (App. p. 37a).

In short, Petitioner's premise that there is factual parity in the *Sohio* and *Dow* cases is not true. The Court below was fully warranted in concluding that *Sohio* does not control this case in view of the critical differences in the patents, the processes claimed and the evidence.

ARGUMENT

As noted earlier, this case does not involve any new or unusual issues of law. The Petition is simply an attempt by an unsuccessful Defendant, caught in copying and using Respondent's commercially successful patented technology to have this Court make new findings of fact and overturn those which were made by a competent District Court and affirmed by the Court of Appeals for the Federal Circuit.

The Federal Circuit affirmed because Petitioner had failed to show that the District Court's findings were clearly erroneous or that the law had been applied incorrectly. The District Court very carefully followed the factual inquiries mandated by this Court in *Graham* with respect to each prior art reference involved, reviewing the contents and the differences as such relate to the claimed subject matter of the Dow patents, (App. pp. 49a to 52a) and the "secondary considerations" were not accorded undue weight. Indeed before those considerations were even addressed, the District Court ruled:

> "I conclude that there are differences between the subject matter claimed in the patent-in-suit and the prior art taken as a whole, and that such differences would not be obvious to those skilled in the art."(Appendix p. 52a).

Petitioner complains to this Court that the Federal Circuit based its affirmance entirely on secondary considerations, or, as referred to by the Federal Circuit, the objective evidence of nonobviousness. First of all that is not true and secondly Cyanamid ignores the fact that the District Court is the one that made the determination in the first instance. The Federal Circuit carefully reviewed and approved the findings of the District Court as to the teachings of each of the references and the differences of the claimed subject matter over such. The very statement cited by Petitioner (Pet. p. 5) to support its contention that the Federal Circuit relied solely on secondary considerations (Pet. p. 5) proves the contrary particularly when taken in the context of the full paragraph containing the statement (App. p. 13a) namely that the secondary considerations were considered in support of its unobviousness determination (App. p. 13a) and not in place thereof.

The Petition lacks of any showing that error was committed by the District Court in determining unobviousness; and it treats the Federal Circuit decision as if it were the judgment of a court of first instance. The reason for that role reversal is plain. Petitioner would like to distract this Court's attention from the District Court opinion, wherein faithful compliance with the *Graham* standards and the factual differences between the *Sohio* case and this one are clearly demonstrated.

Petitioner alleges that the Federal Circuit has created a new standard of patentability by adding to the three prong test a "fourth prong" in evaluating secondary considerations before coming to a conclusion of obviousness or nonobviousness, implying such to

be contrary to the test set forth in *Graham*. Apparently Petitioner argues that *Graham* requires a separate and independent determination before consideration of the objective evidence of nonobviousness.[6] Nothing in *Graham* however mandates such bifurcation. On the contrary this Court considered secondary considerations to be an integral part of the procedure by which nonobviousness is adjudged, stating (383 US 1 at 18):

> "As indicia of obviousness or nonobviousness, these inquiries may have relevance."

In reaching the cited conclusion this Court affirmed a position that had been part of the determination of patentability and validity for over a century. For example in *Smith v. Goodyear Dental Vulcanite Company*, 93 US 486 (1877) this Court stated:

> "We do not say, the single fact that a device has gone into general use and has displaced other

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[6] Contrary to the position counsel for Petitioner now espouses he lectured thus in 1981 in reference to the secondary considerations of the *Graham* decision:

> "The reference to these considerations as 'secondary' is unfortunate, as it has been used as a basis for some courts to relegate this kind of objective evidence to a minor, sometimes non-existing role, in determining nonobviousness. To do so is a mistake for as Judge Markey has pointed out, in a recent Sixth Circuit decision *Nickola v. Peterson*, [580 F2d 898, (Sixth Cir. 1978); *cert. den.* 440 U.S. 961 (1979)] the adjective 'secondary' could not have meant that the determination of obviousness or nonobviousness can be made in disregard of considerations such as commercial success long-felt but unsolved need, failure of others and so forth." (Allegretti and Banner, *Obviousness: 4 Trial Lawyer's Perspective*, Intellectual Property Law Review for 1981, Vol. 13, p. 147 at 169)

devices which had previously been employed for analogous uses, establishes in all cases that the later device involves a patentable invention. It may, however, always be considered; and when the other facts in the case leave the question in doubt, it is sufficient to turn the scale. Id., at 495-96."

CONCLUSION

The Federal Circuit did not disregard this Court's mandate in *Graham* nor did it hold that so-called secondary considerations can substitute for the three tests mandated in *Graham*. The District Court made a sound determination of nonobviousness on the basis of compelling record evidence and only then weighed the secondary considerations as *further* support. The Federal Circuit affirmed based on the facts in this case. It was in no way bound by the decisions in an earlier case which involved different patents claiming different inventions and a different factual background.

The Petition is ill-founded and should be denied.

Respectfully submitted,

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